## IT WAS MIGRATION – THE EXCEPTIONAL ABUNDANCE OF THE LARGE WHITE BUTTERFLY *PIERIS BRASSICAE* (L.) IN 1992

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IN CONSIDERING the exceptional abundance in Britain of the Large White Butterfly *Pieris brassicae* (L.) in 1992, Pollard (1994) asked, "Was it migration?" He concluded that "The question posed . . . has not been resolved conclusively" but suggested that "the similarity and regularity of the pattern of counts over wide areas of southern England suggest emergence within the country rather than immigration from abroad". In his paper Pollard treats naturalists' observations and reports from other interested members of the general public as "anecdotal". A growing number of professional entomologists give undue weight to mathematics and statistics, preferring numbers to less easily quantified first-hand observations.

What is the evidence for a massive immigration of P. brassicae from the Continent in 1992? I first became aware of a sudden, unusual abundance of P. brassicae around the middle of July when, on leaving my house at Martlesham Heath (about ten miles from the Suffolk coast) one morning, I noticed that the large bed of lavender in my front garden was covered with them. A telephone call to Mr S.H. Piotrowski (then Suffolk Butterfly Recorder) confirmed that this sudden appearance of butterflies was not confined to my garden. He had seen similar large concentrations along the Suffolk coast and had heard reports of others both within and outside Suffolk. For example, on the 18th July Mrs E.M. Parsons reported "huge and extraordinary numbers of P. brassicae" feeding on sea lavender on the saltings adjoining Hamford Water, Little Oakley, North Essex. On the very same day, Mr J.P. Bowdrey (in litt.) at Dunwich in Suffolk witnessed "hundreds of brassicae coming in off the sea, flying up the cliff and then crowding onto any available flower to feed. Weather conditions were sunny and warm with only a slight breeze from the sea". There were numerous similar reports and the build-up of interest prompted the Suffolk Naturalists' Society to issue a press release, "Invasion of Cabbage Butterflies", on 20th July.

The press release generated a tremendous response, both locally and nationally. Records came in to Ipswich Museum, to the Suffolk Biological Records Centre and to Butterfly Conservation who, by that time, realised something unusual was happening. Most of the reports referred to large concentrations of butterflies along the Suffolk coast but detailed information supplied by Mrs J.M. Hannaford (pers. comm.) was more enlightening. On 14th July she was on a yacht, sailing with friends from Woolverstone, via Harwich Harbour, to Holland. Between 6pm and 7pm they were about half a mile past the Sunk Light Vessel (located 14 miles south-east of Harwich at 51°51'N 1°35'E). For two to three miles they sailed through a huge swarm of *P. brassicae* heading towards the east coast of Britain. Some of the butterflies were floating on the water, others touched down but managed to

take off again. Interestingly, some of the butterflies were *in cop* and others were attempting to copulate. Most of the butterflies were in flight six to ten feet above the water. The wind was from the south-west, force 2-3.

Nigel Odin (*in litt*.) of Landguard Bird Observatory, near Felixstowe on the Suffolk coast, recorded "probably thousands" of *P. brassicae* at Landguard on dates in July. "Large numbers were seen flying over the sea" and he is in no doubt "that a vast migration of Large Whites took place". The report of Sandwich Bay Bird Observatory (Batchelor, 1994) on the south Kent coast is both detailed and fascinating – "15th July heralded the start of an immense immigration of these butterflies . . . many thousands were observed flying in off the sea from the E.N.E. and continuing inland to the west-south-west . . . With no sign of diminution in numbers the next day, a series of one-minute spot counts was made over a 200 yard stretch of beach at Princes which resulted in an average passage of 362 insects per minute . . . The movement continued apparently unabated for the next ten days". Clearly the network of Bird Observatories in Britain has a valuable part to play in monitoring butterfly migration as well as bird migration.

It is not my intention to comprehensively review the evidence for a massive immigration of P. brassicae in July 1992, although that would certainly be worth doing. I merely want to make the point that there is ample evidence that there was a massive immigration of P. brassicae from the Continent (quite likely originating in France) in July 1992 - in spite of Pollard's analysis of data from the Butterfly Monitoring Scheme and the counts made through an office window on Felixstowe Docks that he uses. Neither is it my intention to diminish the value of the Butterfly Monitoring Scheme. It records numbers not origins and simply was not designed to "recognise" immigration. The Butterfly Monitoring Scheme is very useful in many ways but does not replace the data provided by the army of amateur recorders and observers who still have a most valuable part to play in the study of our insect fauna. The information that they supply augments and tests the work of that scarce species, the professional entomologist. With a little effort it is not difficult to substantiate much of their data which might otherwise be condemned as "anecdotal".

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## References

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